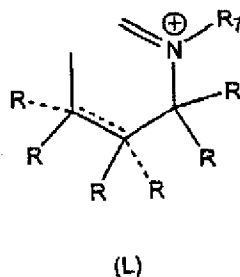
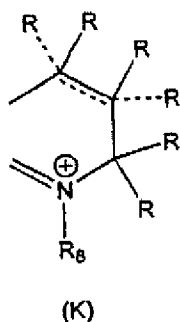
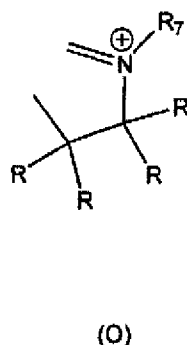
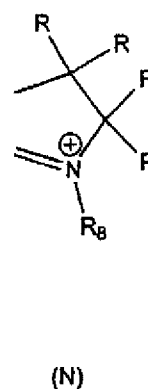
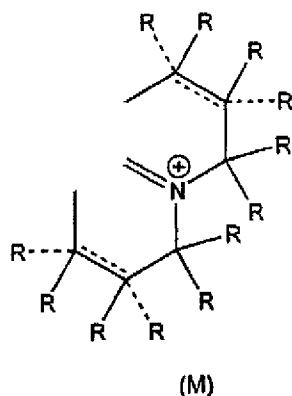


**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

- 1-3. (Canceled)
4. (Currently amended) The carboxamide-substituted dye as claimed in claim 4, 34 in which Cyc1 is substituted or unsubstituted phenyl, naphthyl, pyridyl or cyclohexyl.
5. (Cancelled)
6. (Currently amended) The carboxamide-substituted dye as claimed in claim 5 34, in which R_1 is bridged with R_8 or R_3 is bridged with R_7 or R_1 is bridged with R_8 and R_3 is bridged with R_7 forming a ring system
7. (Previously presented) The carboxamide-substituted dye as claimed in claim 6, in which the ring system comprises 5- or 6-membered rings.
8. (Currently amended) The carboxamide-substituted dye as claimed in claim 7, in which a ring system of the structure (K), (L), (M), (N) or (O) is formed:





in which ~~R are independently defined as R₄₁, R₃, R₄ and R₇, R₈ are as defined in claim 1,~~

and the dashed lines are optionally double bonds in the presence of which the moieties bound via a dashed line are absent.

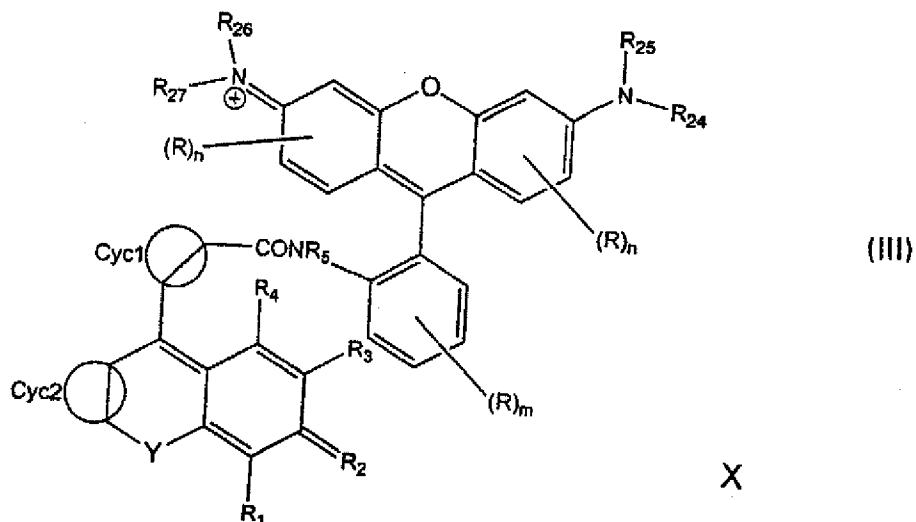
9-12. (Cancelled)

13. (Withdrawn) The carboxamide-substituted dye as claimed in claim 1, in which Y = sulfur, selenium or CR_aR_b, R_a and R_b being as defined in claim 1.

14. (Withdrawn) The carboxamide-substituted dye as claimed in claim 1, in which Y = r moieties -R₁₄ and -R₁₅, R₁₄ and R₁₅ being as defined in claim 1.

15. (Currently amended) The carboxamide-substituted dye as claimed in claim

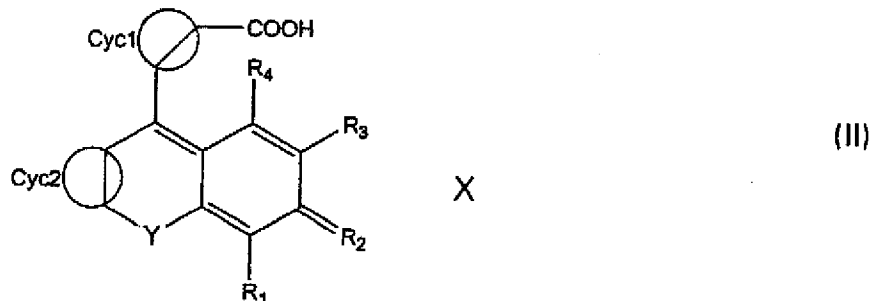
- 8, in which Cyc1 is optionally substituted phenyl, Cyc2 has the structure (E) and Y = oxygen and R_7 and R_3 form a ring system (K) [~~], R_7 and R_3 being as defined in claim 1.~~]
16. (Withdrawn) The carboxamide-substituted dye as claimed in claim 8, in which Cyc1 is optionally substituted phenyl, Cyc2 has the structure (A) and Y = sulfur, selenium or CR_aR_b , R_a and R_b being as defined in claim 1.
17. (Withdrawn) A multichromophore system in which a carboxamide-substituted dye as claimed in claim 1 is coupled via R_5 or/and R_6 to one or more further dye molecules, R_5 and R_6 being as defined in claim 1.
18. (Withdrawn) The multichromophore system as claimed in claim 17, in which the one or more further dye molecules are carboxamide-substituted dyes as claimed in any of claims 1 to 16.
19. (Withdrawn) The multichromophore system as claimed in claim 18, in which coupling takes place on R_5 or/and R_6 of the further carboxamide-substituted dyes, R_5 and R_6 being as defined in claim 1.
20. (Withdrawn) The multichromophore system as claimed in claim 17 of the formula (III)



where the moieties are as defined in claim 1, R in each case independently is defined as R₁, R₃, R₄ and R₂₄, R₂₅ and R₂₆, R₂₇ are defined as R₇, R₈ in claim 1, with n independently being 0, 1, 2 or 3 and m being 0, 1, 2, 3 or 4.

21. (Currently amended) A process for preparing carboxamide-substituted dyes of the formula (I) as claimed in claim 4 34, comprising the following steps:

(a) converting the carboxyl group of a dye of the formula (II)



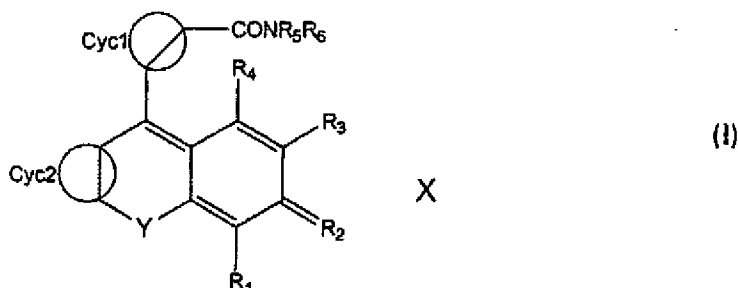
in which the moieties are defined as indicated in claim 1, into an activated form;

- (b) reacting the activated dye obtained in step (a) with a secondary amine HNR₅R₆; and
- (c) optionally isolating the carboxamide-substituted dye of the formula (I) obtained in step (b).
22. (Original) The process as claimed in claim 21, in which step (a) is carried out at temperatures of from room temperature to 60°C.
23. (Previously presented) The process as claimed in claim 21, in which an aprotic solvent is used in step (b).
24. (Previously presented) The process as claimed in claim 21 in which N-hydroxysuccinimide, N-hydroxyphthalimide, N-hydroxynaphthalimide,

O-(N-succinimidyl)-N,N,N',N'-tetramethyluronim tetrafluoroborate (TSTU)
are used for activation.

25. (Cancelled);
26. (Withdrawn) The method as claimed in claim 33, in which the carboxamide-substituted dye of the formula (I) is coupled to at least one of the analyte to be detected and to a component of at least one of a detection reagent and to a support.
27. (Withdrawn) The method as claimed in claim 26, in which detection comprises at least one of an immunological detection and detection by way of nucleic acid hybridization.
28. (Withdrawn) A conjugate of a carboxamide-substituted dye of the formula (I) as claimed in claim 1 wherein the carboxamide-substituted dye is coupled to a binding partner.
29. (Withdrawn) The conjugate as claimed in claim 28, in which the binding partner is selected from the group consisting of peptides, polypeptides, nucleic acids, nucleosides, nucleotides, nucleic acid analogs and haptens.
30. (Withdrawn) The method as claimed in claim 26 in which the carboxamide-substituted dye is coupled to a binding partner and detection is carried out by nucleic acid hybridization processes and immunochemical processes.
31. (Withdrawn) The method as claimed in claim 26, in which coupling takes place via the substituents R_5 or/and R_6 of the carboxamide-substituted dye of the formula (I), the moieties R_5 and R_6 being as defined in claim 1.
32. (Withdrawn) The use as claimed in claim 31, in which coupling is carried out via a covalent bond.

33. (Withdrawn) A method of detecting an analyte using carboxmide-substituted dye comprising the steps of providing one or more compounds of the general formula (I)



for determining at least one of the qualitative and quantitative presence of the analyte with a detection agent;

wherein

Y = oxygen, sulfur, selenium, CR_aR_b , NR_c , a direct linkage or is $-\text{R}_{14}$ and $-\text{R}_{15}$;

R_1 , R_3 , R_4 are independently hydrogen, halogen, $-\text{O}^\ominus$, a hydroxyl group, thiol group, amino group, ammonium group, sulfo group, phospho group, nitro group, carbonyl group, carboxyl group, a carboxylic acid derivative, a nitrile group, isonitrile group, cyanate group, isocyanate group, thiocyanate group, isothiocyanate group or a straight-chain, branched or cyclic saturated or unsaturated hydrocarbon group having up to 40 carbon atoms;

R_a , R_b , R_c and R_{14} , R_{15} independently are as defined for R_1 , R_3 , R_4 ;

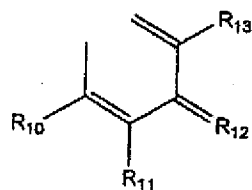


in which

R_7 , R_8 , R_9 independently are hydrogen or a straight-chain, branched or cyclic saturated or unsaturated hydrocarbon group having up to 40 carbon

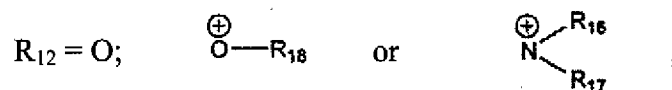
atoms; or

R₁ together with R₂ is



in which

R₁₀, R₁₁, R₁₃ are as defined for R₁, R₃, R₄;



in which

R₁₆, R₁₇, R₁₈ are as defined for R₇, R₈, R₉;

R₅, R₆, independently are a straight-chain, branched or cyclic saturated or unsaturated hydrocarbon group having up to 40 carbon atoms;

Cyc1 is an organic moiety which comprises a ring system selected from aromatic, heteroaromatic, quinoidal and cycloaliphatic rings;

Cyc2 is an organic moiety which comprises a ring system selected from aromatic, heteroaromatic, quinoidal and cycloaliphatic rings;

each of said moieties in the dye of the formula (I) being able to form a ring system with one or more neighboring moieties;

and X being one or more mono- or multivalent anions, when required for balancing the charge;

with the proviso that

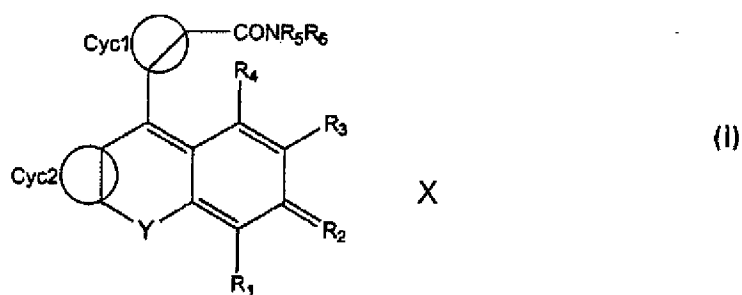
- Y = oxygen,
- Cyc1 = phenyl or substituted phenyl,
- Cyc2 = hydroxyl-, ether- or ester-substituted phenyl

and

- $R_2 = O$

do not appear in the formula (I) at the same time.

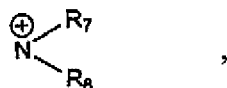
34. (New) A carboxamide-substituted dye of the formula (I)



in which

Y= oxygen, R_1 , R_3 , R_4 are independently hydrogen, halogen, $-O^\ominus$, a hydroxyl group, thiol group, amino group, ammonium group, sulfo group, phospho group, nitro group, carbonyl group, carboxyl group, a carboxylic acid derivative, a nitrile group, isonitrile group, cyanate group, isocyanate group, thiocyanate group, isothiocyanate group or a straight-chain, branched or cyclic saturated or unsaturated hydrocarbon group having up to 40 carbon atoms;

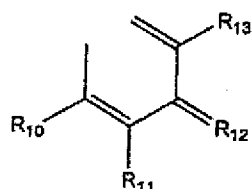
$R_2 =$



in which

R_7 , R_8 , independently are hydrogen or a straight-chain, branched or cyclic saturated or unsaturated hydrocarbon group having up to 40 carbon atoms; or

R_1 together with R_2 is



in which

R_{10} , R_{11} , R_{13} are as defined for R_1 , R_3 , R_4 ;

$R_{12} =$



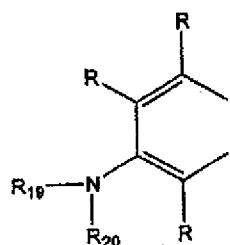
in which

R_{16} , R_{17} , are as defined for R_7 , R_8 ,

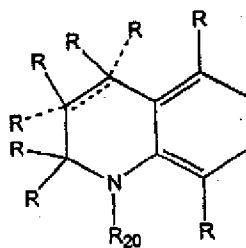
R_5 , R_6 , independently are a straight-chain, branched or cyclic saturated or unsaturated hydrocarbon group having up to 40 carbon atoms, wherein at least one of R_5 and R_6 comprises a carboxy group;

Cyc1 is an organic moiety which comprises a ring system selected from aromatic, heteroaromatic, quinoidal and cycloaliphatic rings;

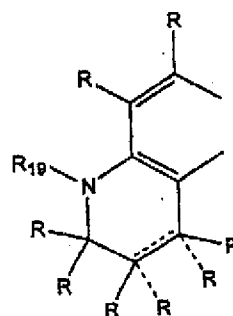
Cyc2 is an organic moiety which comprises a ring system selected from aromatic, heteroaromatic, quinoidal and cycloaliphatic rings; wherein Cyc2 has a structure selected from (A), (E), (F), (H) or (J),



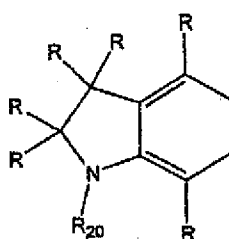
(A)



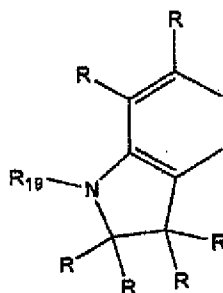
(E)



(F)



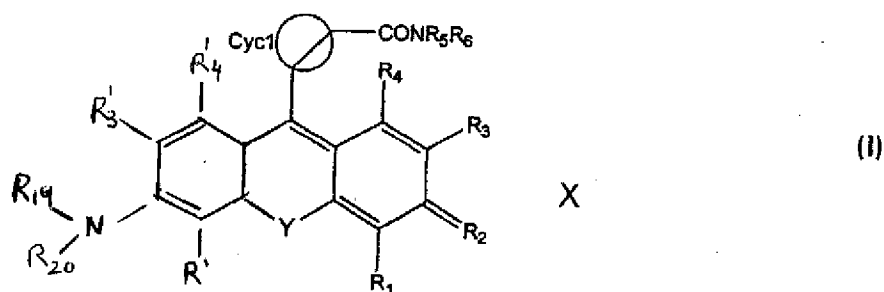
(H)



(J)

in which R in each case independently is defined as $R_1, R_3, R_4; R_{19}, R_{20}$ and the dashed lines are optionally double bonds in the presence of which the moieties bound via a dashed line are absent,
 each of said moieties in the dye of the formula (I) being able to form a ring system with one or more neighboring moieties;
 and X being one or more mono- or multivalent anions, when required for balancing the charge; and wherein at least one of $R_1, R_3, R_4, R_{10}, R_{11}, R_{13}$ and R is a sulfo group

35. (New) A carboxamide-substituted dye of the formula (I)



in which

Y = oxygen, $R_1, R_{1'}, R_3, R_{3'}, R_4$ and $R_{4'}$ are independently hydrogen, halogen, $-O^\ominus$, a hydroxyl group, thiol group, amino group, ammonium group, sulfo group, phospho group, nitro group, carbonyl group, carboxyl group, a carboxylic acid derivative, a nitrile group, isonitrile group, cyanate group, isocyanate group, thiocyanate group, isothiocyanate group or a straight-chain, branched or cyclic saturated or unsaturated hydrocarbon group having up to 40 carbon atoms; wherein at least one of $R_1, R_{1'}, R_3, R_{3'}, R_4$ and $R_{4'}$ is a sulfo group



R_5 , R_6 , independently are a straight-chain, branched or cyclic saturated or unsaturated hydrocarbon group having up to 40 carbon atoms; wherein at least one of R_5 and R_6 comprises a carboxyl group

R_7 , R_8 , R_{19} R_{20} independently are hydrogen or a straight-chain, branched or cyclic saturated or unsaturated hydro carbon group having up to 40 carbon atoms,

Cyc1 is an organic moiety which comprises a ring system selected from aromatic, heteroaromatic, quinoidal and cycloaliphatic rings.

36. (New) The carboxamide-substituted dye of the formula (I) of claim 34, wherein R_7 R_8 independently are straight-chained saturated hydrocarbon groups.
37. (New) The carboxamide-substituted dye of the formula (I) of claim 35, wherein R_1 R_1' independently are sulfo groups.